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U.S. DEPT. OF AGRICULTURE
NAT'L MEMIC, LIBRARY REPORT NO. 14

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PROCEEDINGS SECTION CURRENT SENIAL RECORDS

Colina liner and Processing Test Results

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Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38117 February 16, 1973

This is the fourteenth, and last, report on fiber and processing test results on the 1972 cotton crop. These reports were issued twice each month during the harvesting season, and will be summarized in a comprehensive report to be issued in early spring. This 1972 group of reports gives data on the same subject as "Summary of Cotton Fiber and Processing Test Results, Crop of 1971", April 1972. These reports are published by the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, P. O. Box 17723, Memphis, Ten 38117.

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1972 Discussion of Test Results

Cotton testing laboratories of the Agricultural Marketing Service, USDA, report that fibers from the Southwestern short staple samples tested through February 9, 1973 are longer and coarser than through the end of the season last year. Shirley Analyzer nonlint content and picker and card waste are lower. Yarns spun from these samples are stronger and have higher appearance grades. Yarn imperfections are less than a year ago. Average spinning potential yarn number is higher.

Averages for all medium staple samples tested this season show about the same fiber test results as a year ago. Yarns spun from these samples show fewer imperfections than a year ago. Average spinning potential yarn number is higher.

South Central medium staple samples are shorter and stronger than through the end of last season. Yarns spun from these samples show about the same yarn qualities as last season.

No additional Southeast, Southwest or Western medium staple samples were received during this report period.

Averages for all long staple samples tested this season are stronger at zero gage strength than a year ago. Picker and card waste and comber waste are lower than through the end of the season last year. Yarns spun from these samples show lower yarn appearance grades. Average spinning potential yarn number is higher this season.

No additional long staple samples were received from any of the areas during this report period.

Extra long staple, American upland, samples from the West are more uniform and stronger at 1/8" gage strength than through the end of the season last year. Shirley Analyzer nonlint content and comber waste are higher this year. Yarns spun from these samples show fewer imperfections than last season.

No additional American Pima, extra long staple samples were received from the West during this report period.

Averages of fiber and processing tests from selected gin points in the United States through February 9, 1973

Table 1.--Cotton:

Area, and tested Crop year	No.	65	Medium Staple: Southeast 1971 68	South Central 1971 1972 168	Southwest 1971 46 1972 49		U.S. Average 1971 1972	Significant dif- ference 2/
2.5% 50/s span un	Inches	0.95	1.08	1.10	1.04	1.12	1.09	0.02
50/2.5 unif.	Pct.	4 7 7 7	45 45	7† 17	44 45	4 45 72	44 45	a
fine-	Rdg.	3.8	4.4	4.3	4.0	4.7	4.4	2 0.2
Zero	Mpsi	79	79	81 83	8 ⁴ 88	8 %	83 84	α
1/8" gage	G/tex	20	22 53	22	55	25 24	23	-
S A nonlint	Pct.	4.4	3.0	3.0	3.3	2.6	3.0	0.5
P&C waste	Pet.	7.5	9.9	6.1	6.5	5.5	6.0	0.5
Skein str.	Lbs.	86 94	99	103	102	121 110	105 104	4 (22s)
Appear- ance	Index	112	109	112	113	120	113	ι ν
Ly Imperf- ections	No.	70 70 70	20	20	35 28	24 17	23	a
Spin. Potent.	Yarn No.	37 46	61 66	62 63	55	02	62 64	т
	1/8" S A P & C Skein Appear-Imperf- gage nonlint waste str. ance ections	1/8" S A P & C Skein Appear-Imperf Poten gage nonlint waste str. ance ections Spin G/tex Pct. Lbs. Index No. Yarn S28 Carded Yarn Yarn Spin Sp	1/8" S.A P.& C Skein Appear - Imperf Poten 2/tex Pct. Lbs. Index No. Yarn 20 4.4 7.2 86 112 40 37 21 3.7 6.8 94 116 29 46	1/8" S.A P.& C Skein Appear Imperf Poten 1/8" nonlint waste str. ance ections G/tex Pct. Ibs. Index No. Yarn 22s 4.4 7.2 86 112 40 37 21 3.7 6.8 94 116 29 46 22 3.4 6.6 99 109 20 61 23 3.0 6.2 104 104 16 66	1/8" S.A P.& C Skein Appear Imperf Poten gage nonlint waste str. ance ections Poten	1/8" S A P & C Skein Appear-Imperf- Potent. Sage Str. ance ections Potent. Sz. Index No. Yarn No. Sz. Sz.	S A P & C Skein Appear Imperf Potent.	S A P & C Skein Appear Injections Spin. G/tex

Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples. Based on a limited number of samples of modal quality

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Averages of fiber and processing tests from selected gin points in the United States through February 9, 1973 $_{\rm 1}$ (Continued)

Table 1.--Cotton:

ı												
		SPY	No	65	70	777	71 76					3
		Imprfetns card comb	No	10	9	15	12		10		3 4	ď
	1 1	Impri	No.	zarn 3 22 7 24	8 8	27.	23 7 7	Yarn				a
Results	lity	Appearance carded combed	Indx	118 117	117	103	111	Combed	100		112	5
Test	rn Qua	Appe carded	Lbs. Indx	109	107	95	103	508				5
Processing		gth combed	Lbs.	123	130	146 145	131		1 99		65	2(50s)
Pro		Strength carded combed	Lbs.	102	113	127	114	and		ma		l _t (22s)
	Comber	Waste	Pct.	17.2	16.4 16.0	17.3	17.2	Am er ican U p land	16.0	Ame r ican Pima	17.6	0.5
	P&C	Waste	Pct.	7.8	0,8 0.8	8.8	0, α ω α	Ameri	ω. ω. ω.	Ame	8.5	0.5
	SA	Non- lint	Pct.	3.6	1. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	20.7	33.5		0 0 0		2.7	0.5
S	ıgth	1/8" gage	G/tx	22	5¢	25	54		33		33	٦
Results	Strength	Zero gage	Mpsi	79	883	92	88		105		99	α
Test		Mike	Rdg.	4.3	4.5	33.	0.4	Array	0.4		3.8	0.2
Fiber	ц	Unif Mike	Pct.	444	144 144	†††	77 74 74 74	Ari	32		32	a
F.	Length	Span	In.	1.14	1.22	1.16	1.16		1.41		1.45	0.02
	+	Lots	No	16	m4	15	34		വന		55 57	
	Staple group,	Crop year		Long Staple: Southeast 1971 1972	South Central 1971 1972	West 1971 1972	U. S. Average 1971 1972	Extra Long Staple:	West 1971 1972		West 1971 1972	Difference 2/

Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples. Based on a limited number of samples of modal quality नोल

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1972

	Spin.	tial	읾		42	77	43		04
	Imprfect'ns		위		.67	41	27		14
Yarns	Imprf	8s or 74 tx	일		100	63	39		14
arded	ance	8s or 22sor 8s or 22sor 74 tx 27 tx	읾		70	110	120		06
ults - (Appearance Index	8s or 74 tx	읾		100	110	120		110
Processing Test Results - Carded Yarns	tion	22s or 27 tx	Pct		8.2	7.0	6.5		7.0
sing Te	Elongation	8s or 74 tx	Pct		9.6	8.2	7.7		8•0
Proces	gth	8s or 22s or 74 tx 27 tx	Tps		87	76	91		16
	Strength	8s or 74 tx	Lbs		ENT * 294	310	ENT 299		315
	Color Raw Stock P & C	Waste 8s or 74 tx	Pct		100 PERCENT * 8.0 294	75 PERCENT 7.8 31	80 PERCENT 6.9 29		90 PERCENT 9.8 31
	Color w Stock	Yel	ଧ		100	7	ε Ε		δ &
		Gra	<u>N</u>		en.	9	ю		_
	S.A.		Pct		. 8	4.7	3.8		9.9
lts	Elon-	1/8"	Pct		8.6	7.4	31		7.2
Fiber Test Results	Fiber Strength	1/8" Gage	G/tex		LANKART 57 20 8	RILCOT 90 22	STRIPPER 31 20 6.		GREGG 35 22
Fiber	Fi	Zero	Mpsi		69	11	2		79
	Mike		Rdg		2.7	3.0	6.5		2.7
	Digital brograph	Unif	Pet		43	94	94		45
	Digital Fibrograph	2.5% span	티		96*0	0.94	0.94		30 0.90
		Stple	32s	AREA	31 0.96	30 0.94	31	AR EA	30
Area,	iber	apo				44	45	4	\$
Production Area, Classification	& Sample Number	No Grade Name & Code		SOUTHWEST NORTHWEST TEXAS	BROWNFIELD 3 SLM LT SP 42	LARIAT 3 SLM TG	SEMINOLE 3 SLM LT SP	WESTERN NEW MEXICO	CAUSEY 3 SLM TG

* 100 percent selected for tests, less than 100 percent in the area

1972
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crop
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cs by
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Quality
staple:
medium
upland
American
3 Cotton,
Table

								- 7 -	•		
	Spin. Poten- tial	외		62	15	65	9	65	20	61	64
	Imprfect'ns 22s or 50s or 27 tx 12 tx	8		21	15	13	14	11	11	E	15
arns	100	<u>S</u>		27	18	18	11	18	54	25	22
arded	Appearance Index 22s or 50s or 27 tx 12 tx	읽		06	90	1 00	06	90	80	80	90
lts - C		외		120	120	120	120	120	120	110	100
Processing Test Results - Carded Yarns	tion 50s or 12 tx]ct		4.8	3.4	4.4	4 · 8	4.2	4.1	4.1	6.5
ssing Te		lst lst		4.	5.2	0 • 9	6.1	5.6	5.2	•	6.3
Proces	Strength s or 50s or tx 12 tx	<u>l.bs</u>		39	27	35	38	35	59	36	28
	Stre 22s or 27 tx	[집]		CENT	CENT 91	CENT	CENT 109	CENT 102	SENT 90	CENT 103	CENT 89
	P4 32	<u>G</u>		100 PERCENT 5.7 111	98 PERCENT 6.0 91	100 PERCENT 5.4 101	90 PERCENT 6.2 109	100 PERCENT 6.6 102	100 PERCENT 6.8 90	100 PERCENT 6.0 103	100 PERCENT 6.5 89
		일		2 10	~	2	~	2	2 10	2 10	7
	Co Raw Gra	일		4	•	4	4	4	4	~	4
	S.A. Non- Lint	Lite		3.4	4.2	3.4	2.6	3	3.4	2.6	3.0
t s	Elon- gat'n 1/8"	lst Lst		NE 16	LLE 21 6.1	LLE 21 6.2	NE 16	LLE 213	LLE 213	NE 16 7.7	LLE 21 6.6
Fiber Test Results	er gth 1/8" Gage	G/tex		SELTAPINE 16 24 7.7	STONEVILLE 213 21 6.1	STONEVILLE 213 21 6.2	DELTAPINE 16 23 7.5	TONEVILLE	TONEVILLE	DELTAPINE 16 23 7.7	STONEVILLE 213 19 6.6
iber Te	Fiber Strength Zero 1/ Gage Ga	Mpsi		0 88	83	S 83	0 84	81	S 80	0 81	36
H	Mike	Reg		3,3	4.3	4.5	3.9	4:4	4:4	3.8	3.7
	al graph Unif.	<u> </u>		41	45	71	43	· 111	43	4 6	45
	LE CI R.	티		1.11	1.06	1.11	1.09	1.11	1.06	1.10	1.05
	Stple	32s	AREA	35	34	34	34	34	34	34	33
rea,				51	19	15	15	51	15	41	15
Production Area, Classification	Sample Number No Grade Name & Code		SOUTH CENTRAL ARKANSAS	ALTHEIMER 4 LM	BAY 4 SGO	DUMAS 4 LM	GRADY 4 LM	HEL ENA	HUGHES	LOUSIANA SHREVEPORT 4 SLM	MISSOURI HELL CITY 4 LM

Table $^{\mu}$ --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1972

Production Area, Classification	rea, ion			j±,	Fiber Test Results	st Resul	ts					몺	ocessi	ing Tes	t Resu	Processing Test Results - Carded Yarns	arded Ya	arns		
& Sample Number	er	Digital Fibrograph	al aph		Fiber Strength	er gth	Elon-	Elon- S.A.		Color Raw Stock	P & C and	Color P & C Strength Raw Stock and		Elongation		Appearance Imprfect'ns Index	ance	Imprfec		Spin. Poten-
No Grade Name & Code		Stple 2.5%	Unif.	Mike	Zero Gage	1/8" Gage	1/8"	1/8" Lint	Gra	Yel W	Comber 2	Yel Comber 22s or 50s or 50s or 22s or 50s or 22s or 50s or 70s o	s or 22 tx 27	2s or 5 7 tx 1:	Os or 2	22s or 27	os or 2 tx	22s or 5 27 tx		tial
	32s	티	Pet	Rdg	Mpsi	G/tex	Pet	Pet	No No	81	Pet	Tps I	Lbs Pct		Pet_	&	&	8	No.	윉
WESTERN	AREA																			
ARIZONA AQUILA 4 SIM 4	41 40	1.40	35	h.0 104	DEL 104	CERRO 33	0.9	6.0 2.8	α	10	100 PERCENT 8.0 16	100 PERCENT 2 8.0 16.5 65 35 4.7 4.2 100 100	65	35	7.4	4.2	100	100	5	4

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